

549 974

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 October 2004 (07.10.2004)

PCT

(10) International Publication Number
WO 2004/086097 A2

- (51) International Patent Classification⁷: **G02B**
- (21) International Application Number:
PCT/IB2003/001805
- (22) International Filing Date: 28 March 2003 (28.03.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (71) Applicant (for all designated States except US): **PREMIER POLYTRONICS, PVT. LTD.** [IN/IN]; 304, Trichy Road, Singanallur, Coimbatore 641 005 (IN).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **RAMACHANDRAN, Shekaripuram, Narayanaswamy** [IN/IN]; "Shree Nivas", No:3, Fourth Cross Road, Chinthamani Nagar, K.K. Pudur, Coimbatore 641 038 (IN). **SRINIVASAN, varadarajan** [IN/IN]; D-6, Carthic Apartments, OM Sakthi Nagar, Ramanathapuram, Coimbatore 641 045 (IN). **ANBARASAN, Mariappan** [IN/IN]; No. 7 OM Muruga Street, Thanner Pandal, V.K. Road, Peelamedu, Coimbatore 641 004 (IN).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: AUTOMATIC FIBER PROCESSING SYSTEM INCLUDING METHOD AND APPARATUS FOR PRODUCING END-ALIGNED FIBER SAMPLES

(57) Abstract: The apparatus for the preparation of an end-aligned fiber sample comprises an array of fiber combs, a first drive unit, a fiber collection device connected to the first drive unit, a suction device, a detection device and a control unit to control each of the foregoing components. The method for preparing an end-aligned fiber sample uses the control unit to operate each of the foregoing components to prepare an end-aligned fiber sample. The apparatus can be combined with testing units for testing the end-aligned fiber samples. One of the testing units can test for short fiber content. The testing for short fiber content also can employ the detection device of the apparatus.

WO 2004/086097 A2